

SEP 20 2010

Application No. 10/573,301
After Final Office Action of May 17, 2010

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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of the claims:

1 (Currently amended). A manufacturing method of a liquid crystal display panel, comprising:

a sealant arranging step of arranging a sealant on a main surface of one of or each of two substrates to be bonded to each other;

a liquid crystal dropping step of dropping liquid crystal on one of said two substrates wherein each of the two substrates has an alignment film; and

a bonding step of bonding said two substrates to each other, wherein said method further includes:

to be performed prior to said sealant arranging step, a deaerating step of arranging in a pressure-reduced atmosphere at least a substrate on which said sealant is to be arranged out of said two substrates, such substrate being placed in the pressure reduced atmosphere with the alignment film exposed; and

to be performed prior to said bonding step, a releasing step of releasing said pressure-reduced atmosphere by an inert gas.

2 (Original). The manufacturing method of a liquid crystal display panel according to claim 1, wherein

said releasing step is performed prior to said sealant arranging step.

3 (Previously presented). The manufacturing method of a liquid crystal display panel according to claim 1, wherein

said sealant arranging step is performed in a released atmosphere.

4 (Previously presented). The manufacturing method of a liquid crystal display panel according to claim 3, wherein

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said sealant arranging step is performed within 30 minutes after said releasing step.

5 (Previously presented). The manufacturing method of a liquid crystal display panel according to claim 1, wherein

said deaerating step includes a step of arranging said two substrates together in said pressure-reduced atmosphere.

6 (Withdrawn). The manufacturing method of a liquid crystal display panel according to claim 5, wherein

said releasing step is performed after said sealant arranging step and said liquid crystal dropping step.

7 (Withdrawn). The manufacturing method of a liquid crystal display panel according to claim 1, wherein

said releasing step is performed prior to said liquid crystal dropping step, and said liquid crystal dropping step is performed within 30 minutes after said releasing step.

8 (Withdrawn). A manufacturing method of a liquid crystal display panel comprising:
a sealant arranging step of arranging a sealant on a main surface of one of or each of two substrates to be bonded to each other;

a liquid crystal dropping step of dropping liquid crystal on one of said two substrates; and

a bonding step of bonding said two substrates to each other, wherein said method further includes:

to be performed prior to said liquid crystal dropping step, a deaerating step of arranging in a pressure-reduced atmosphere at least a substrate on which said liquid crystal is to be dropped out of said two substrates; and

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to be performed prior to said bonding step, a releasing step of releasing said pressure-reduced atmosphere by an inert gas, wherein
said releasing step is performed prior to said liquid crystal dropping step, and
said liquid crystal dropping step is performed in a released atmosphere.

9 (Withdrawn). The manufacturing method of a liquid crystal display panel according to claim 8, wherein

said liquid crystal dropping step is performed within 30 minutes after said releasing step.

10 (Withdrawn). The manufacturing method of a liquid crystal display panel according to claim 8, wherein

said deaerating step includes a step of arranging said two substrates together in said pressure-reduced atmosphere.

11 (Withdrawn). The manufacturing apparatus used in a manufacturing method of a liquid crystal display panel, the method including:

a sealant arranging step of arranging a sealant on a main surface of one of or each of two substrates to be bonded to each other;

a liquid crystal dropping step of dropping liquid crystal on one of said two substrates; and

a bonding step of bonding said two substrates to each other, wherein said apparatus comprises:

pressure-reduced atmosphere creating means for arranging the substrates in a pressure-reduced atmosphere; and

releasing means for releasing said pressure-reduced atmosphere by an inert gas, wherein

said pressure-reduced atmosphere creating means includes
a vacuum chamber,

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a substrate arranging member for arranging the substrates in said chamber, and
a vacuum pump for evacuating said vacuum chamber, and wherein
said releasing means includes
inert gas introducing means for introducing an inert gas into said vacuum chamber.

12 (Withdrawn). The manufacturing apparatus of a liquid crystal display panel
according to claim 11, wherein
said vacuum chamber is formed so that the two substrates to be bonded to each
other can be accommodated.

13 (Withdrawn). The manufacturing apparatus of a liquid crystal display panel
according to claim 11, wherein
said manufacturing apparatus only comprises pressure-reduced atmosphere
creating means and said releasing means.

14 (Currently amended). A manufacturing method of a liquid crystal display panel,
comprising:

a sealant arranging step of arranging a sealant on a main surface of one of or each
of two substrates to be bonded to each other;

a liquid crystal dropping step of dropping liquid crystal on one of said two substrates
wherein each of the two substrates has an alignment film; and

a bonding step of bonding said two substrates to each other, wherein said method
further includes:

to be performed prior to said sealant arranging step, a deaerating step of arranging
in a pressure-reduced atmosphere at least a substrate on which said sealant is to be
arranged out of said two substrates, such substrate being placed in the pressure reduced
atmosphere with the alignment film exposed; and

to be performed prior to said bonding step, a releasing step of releasing said
pressure-reduced atmosphere by an inert gas;

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wherein said releasing step is performed prior to said sealant arranging step and said sealant arranging step is performed in an inert gas atmosphere provided by the releasing step.